

REMARKS

In light of the above amendatory matter and remarks to follow, reconsideration and allowance of this application are respectfully solicited.

Claim 5, the only claim in this application, was rejected under 35 USC 103 as unpatentable over the combination of Nagano (previously cited) and Agrawal (US published application 2003/0227664). The Examiner recognized that Nagano fails to describe an electrochromic infrared adjuster having an infrared transmittance that can be electrically controlled to adjust the amount of infrared electromagnetic wave transmitted to the image sensor. However, the Examiner contended that, since Nagano describes several design choices for a "material element," including an electro-chromic element, that is used to adjust the full spectrum of visible light transmitted therethrough, it would be obvious to use an electrochromic filter whose transmittance to infrared radiation is adjustable, such as allegedly described by Agrawal. Applicant's representative respectfully disagrees.

The Examiner recognizes that the purpose of the present invention is to provide night shooting, namely, night imaging, **without** using an infrared cutoff filter. In contrast, and as noted by the Examiner, Nagano relies upon a "near infrared light cut filter." This light cut filter is, of course, a near infrared cutoff filter, the very filter that is avoided by the present invention.

Nagano's "material element" controls the light transmission factor of visible light and, ideally, "has a constant light transmission factor regardless of the wavelengths of incident light" (see paragraph [0088] of Nagano). But, since the light transmission factor of Nagano's material element (material element 9), is not constant, as illustrated in Nagano's Fig. 3, Nagano controls the light transmission factor of his material element "so that the amount of light incident on the

image pickup element 10 becomes constant" (see paragraph [0091]). In virtually all of the embodiments described by Nagano, "the light transmission factor wavelength dependency of the material element 9 is corrected by white-balance adjustment" (see paragraph [0111]). That is, Nagano compensates for the variable light transmission factor over the visible light band in an effort to achieve a substantially constant transmission factor. Whereas Nagano's photoelectric conversion element has high sensitivity to near infrared light, Nagano places a near infrared light cut filter on the optical axis to compensate for this high sensitivity (see paragraph [0186]). The function of Nagano's near infrared light cut filter is to remove the near infrared light to which his photoelectric converter has high sensitivity. He does not seek to adjust the amount of infrared transmitted through his material element -- he seeks to eliminate it. See also paragraphs [0191], [0193] and [0197].

While Agrawal describes an electrochromic filter that blocks near infrared light for daylight shooting but passes near infrared light for night shooting, it is respectfully submitted that, absent Applicant's disclosure, there is no reason to eliminate Nagano's near infrared light cut filter based upon Agrawal's description, especially since it is clear from Nagano that his infrared light cut filter is essential. Contrary to the conclusion reached in the Office Action under reply, one of ordinary skill in the art, after reading and understanding Nagano, would not think to replace Nagano's material element 9 with an infrared adjuster, formed as an electrochromic device, that is controlled to vary its transmittance to infrared wavelengths so as to adjust the amount of infrared radiation transmitted through it, even though Agrawal may describe such a device. That is, it is improper to reconstruct Nagano in a manner that is directly contrary to Nagano's teachings, by using Applicant's disclosure as a guide and then reassembling bits and pieces from the prior art (e.g. Agrawal), especially when the result of such reconstruction

eliminates what Nagano describes as a necessary element. Notwithstanding the apparently lowered bar in establishing obviousness effected by *KSR*, it still is not permitted to rely on hindsight for the purpose of modifying a reference in order to defeat an otherwise patentable claim.

Furthermore, claim 5 is amended to particularly point out the specific construction of the claimed lens assembly in an effort to further distinguish Applicant's invention from the prior art. The embodiment described at, for example, paragraph [0094] of Applicant's corresponding published application, is particularly claimed in amended claim 5, namely, the infrared transmission amount adjusting means 100 is placed between the iris unit 98 and the focusing lens group 99. Notwithstanding the several embodiments described by Nagano, neither Nagano nor Agrawal is suggestive of the construction now specified by claim 5.

Therefore, in view of the significant and unobvious differences between Applicant's claim 5 and the cumulative teachings of Nagano and Agrawal, the withdrawal of the rejection of this claim is respectfully solicited.

Statements appearing above in respect to the disclosure in the cited reference represent the present opinions of the undersigned attorney and, in the event the Examiner disagrees with any of such opinions, it is respectfully requested that the Examiner specifically indicate those portions of the references providing the basis for a contrary view.

Please charge any additional fees that may be needed, and credit any overpayment, to our
Deposit Account No. 50-0320.

Respectfully submitted,
FROMMER LAWRENCE & HAUG LLP

By:

A handwritten signature in black ink, appearing to read "William S. Frommer", is written over a horizontal line.

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